Great Barrier Reef & Torres Strait Vessel Traffic Service (REEFVTS)

USER GUIDE

January 2014

Australian Government
Australian Maritime Safety Authority

QUEENSLAND GOVERNMENT

Important

REEFVTS relies on the reports that it receives from ships. The information used by REEFVTS is only as accurate as the information that is given in these ship reports.

REEFVTS may not know about all the hazards in the region and ships may encounter unreported hazards at any time. Any hazards should be reported to REEFVTS immediately.

The Master of a ship is responsible for the ship's operation, and is responsible for the safe navigation of the ship under all circumstances.

The information provided below is a guide only. Any ship, owner, operator, charterer, Master, or person directing the movement of a ship must still follow all relevant laws or regulations, and must take any precaution required by ordinary seamanship or the special circumstances of the case. Neither the Commonwealth of Australia nor the State of Queensland accept any responsibility for any decision made by any Master or crew member.

If there is any difference between the information in the REEFVTS User Guide and the relevant laws, the relevant laws should be followed.

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1. Definitions and abbreviations

AIS	Automatic Identification System
AMSA	Australian Maritime Safety Authority
APR	Automated Position Reporting via Inmarsat C
Chemical carrier	a ship to which the BCH or IBC Code applies – see Marine Order 17 (Liquefied Gas Carriers and Chemical Carriers)
Combination carrier	a ship designed to carry either oil or solid cargoes in bulk
IMO	International Maritime Organization
IMN	Inmarsat Mobile Number
INF Code	Irradiated Nuclear Fuel Code – see Marine Order 41 (Carriage of Dangerous Goods)
Length of tow	the distance between the stern of the towing vessel and the after end of the tow
Length overall	the length overall of a vessel is 110% of the length as shown on the vessel's load line certification. If it is not possible to measure the length overall of the ship in this way, the length overall is the distance between: a) a vertical line passing through a point that is the foremost part of the bow; and b) a vertical line passing through a point that is the aftermost part of the stern.
Liquefied gas carrier	a ship to which the EGC, GC or IGC Code applies – see Marine Order 17 (Liquefied Gas Carriers and Chemical Carriers)
MASTREP	the Modernised Australian Ship Tracking and Reporting System - see Marine Order 63 (MASTREP)
MSI	Maritime Safety Information
MSQ	Maritime Safety Queensland
Navigation Act	the Australian Government's *Navigation Act 2012*
Oil tanker	a) a ship constructed or adapted primarily to carry oil in bulk as cargo; or b) a combination carrier when it is carrying oil in bulk as cargo; or c) a chemical tanker when it is carrying oil in bulk as cargo; or d) any other ship fitted with cargo spaces which are constructed and used to carry oil in bulk of an aggregate capacity of 200 cubic metres or more.
REEFREP	the mandatory ship reporting system established by IMO Resolution MSC.52(66), amended by Resolution MSC.161(78) and Resolution MSC.315(88) – see Marine Order 56 (REEFVTS)
REEFVTS	the Great Barrier Reef and Torres Strait Vessel Traffic Service, operated jointly by the Australian Maritime Safety Authority and Maritime Safety Queensland
STI	Ship Traffic Information
UKCM	Under Keel Clearance Management
VTS	Vessel Traffic Service

2. Purpose

This guide will help masters of ships give REEFVTS the correct ship reports and benefit from the services provided by REEFVTS. It describes:

- the requirements for ships entering and transiting through the REEFVTS Area, including the mandatory reporting procedures, recommended shipping routes and compulsory pilotage areas; and
- the vessel traffic services provided by REEFVTS.

The information in this guide does not replace or change any rules in Australia's *Navigation Act 2012* which apply to waters within the REEFVTS Area (see section 4). If there is any difference between the information in the REEFVTS User Guide and the relevant laws, the relevant laws should be followed.

The master of a ship is responsible for the ship's operation, and is responsible for the safe navigation of the ship under all circumstances.

The information given here is a guide only. Any ship, owner, operator, charterer, master, or person directing the movement of a ship must still follow all relevant laws or regulations, and must take any precautions required by ordinary seamanship or by the special circumstances of the case.

3. Introduction

The environmental and cultural significance of the Great Barrier Reef and Torres Strait regions are internationally recognised. The Great Barrier Reef Marine Park was established in 1975 and added to the World Heritage list in 1981. In 1990 the International Maritime Organization (IMO) named the Great Barrier Reef as the world's first Particularly Sensitive Sea Area (PSSA). The IMO also named Torres Strait as a PSSA in 2005.

3.1 REEFVTS

The Queensland and Australian Governments established REEFVTS in 2004. Its purpose is to:

- make navigation in Torres Strait and the inner route of the Great Barrier Reef safer by working with shipping to give the best possible information on potential traffic conflicts and other navigational information;
- minimise the risk of maritime accidents, and therefore avoid the pollution and damage which such accidents can cause to the marine environment in the Great Barrier Reef and Torres Strait; and
- assist with quick response if a safety or pollution incident does occur.

REEFVTS is operated jointly by the Australian Maritime Safety Authority (AMSA) and Maritime Safety Queensland (MSQ). AMSA is an agency of the Australian Federal Government; whilst MSQ is an agency of the Queensland State Government.

REEFVTS operates 24 hours a day from the VTS Centre, situated at Townsville on the Queensland coast.

REEFVTS uses information from many sources, including the Automatic Identification System (AIS); Radar; Automated Position Reports (APR) via Inmarsat C and the route plans that ships provide to REEFVTS.

3.2 Vessel Traffic Service (VTS)

To help with the safe navigation of ships, REEFVTS:

- monitors the movement of participating ships in the REEFVTS Area;
- gives timely, relevant and accurate information to ships;
- keeps a listening watch on REEFVTS VHF working channels;
- receives the information given by masters under the REEFREP mandatory ship reporting requirements; and
- responds to requests for information, such as ship traffic and maritime safety information.

If REEFVTS has additional information which may help decision-making on-board a vessel, REEFVTS may contact that vessel.

3.3 Authority

The Great Barrier Reef and Torres Strait Ship Reporting System (REEFREP) was established as a mandatory ship reporting system under the International Convention for the Safety of Life at Sea (SOLAS Regulation V/11). REEFREP was formally adopted by the IMO's Maritime Safety Committee in Resolution MSC.52(66), and later amended by Resolutions MSC.161(78) and MSC.315(88).

Australia's *Navigation Act 2012* gives the general power to make regulations to implement SOLAS (s339) and the related power to make Australian Marine Orders (s342). The laws about mandatory ship reporting are based on these powers.

Marine Order 56 (REEFREP) states that ships which are required to report to REEFVTS must do so whether they are voyaging overseas, between states or within one state.

REEFVTS manages and operates REEFREP.

4. REEFVTS Area

The REEFVTS Area is described in Marine Order 56 (REEFREP) and as shown in Figure 1.

More detailed information on the REEFVTS Area can be found in AUSCHART 4620, 4635 and 490.

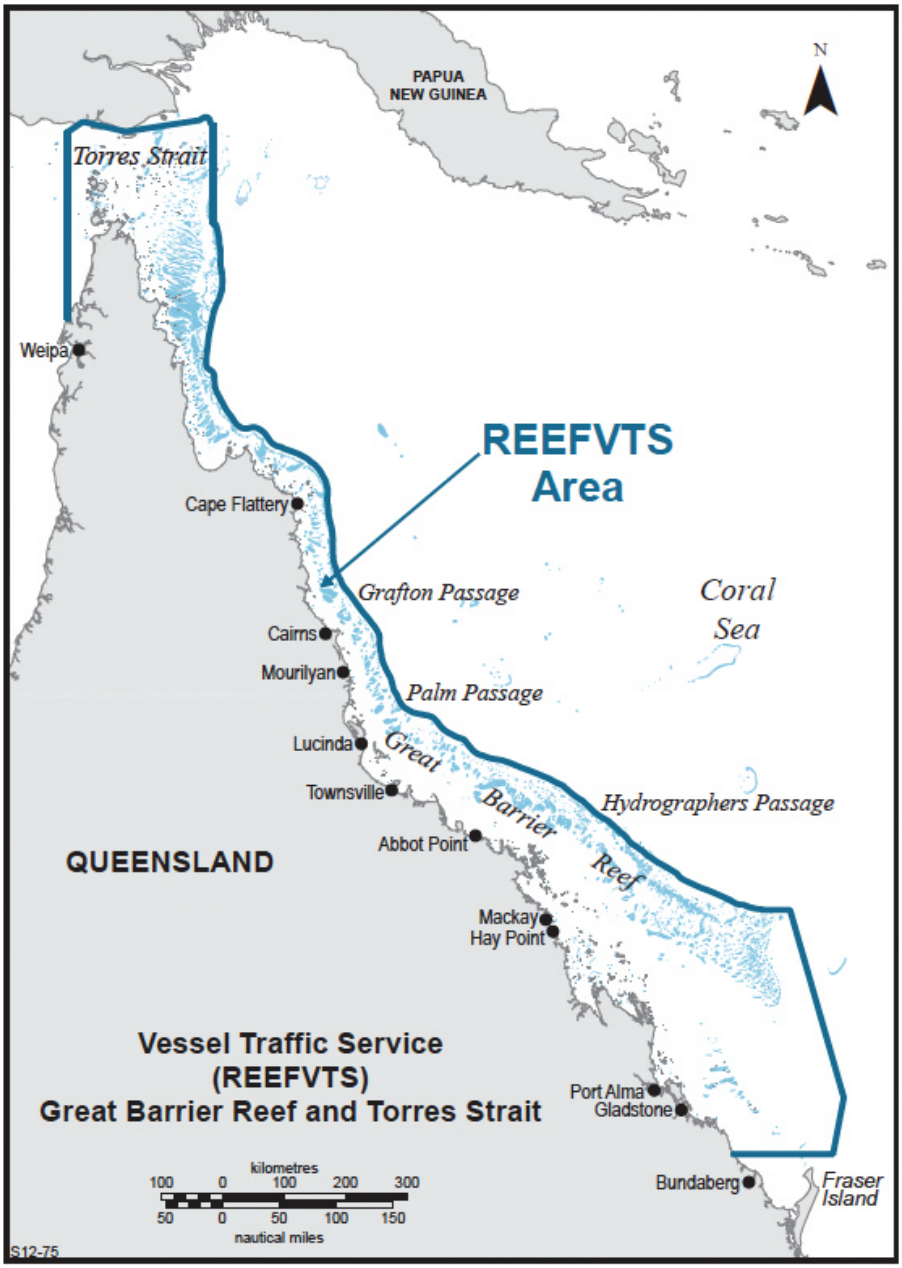


Figure 1: REEFVTS Area

5. Ships required to report to REEFVTS

5.1 General obligation

The following categories of ships must report to REEFVTS:

a) all ships with a length overall of 50 metres or more;

b) all oil tankers, liquefied gas carriers, chemical carriers or ships coming within the Irradiated Nuclear Fuel (INF) Code, including those with a length overall of less than 50 metres; and

c) ships which are towing or pushing, or being towed or pushed, where either of the ships belongs to category a) or category b), or where the length of the tow is 150 metres or more. The length of the tow is measured from the stern of the towing vessel to the after end of the tow.

5.2 Voluntary reporting

Other vessels transiting the REEFVTS Area may report on a voluntary basis as defined in this user guide.

5.3 Warships, naval auxiliaries and government ships

SOLAS Regulation V/11 does not apply to any warship, naval auxiliary, or any ship owned or operated by government; however SOLAS does state that "such ships are encouraged to participate in ship reporting systems".

The Australian Government fully supports this approach, and all ships of the Royal Australian Navy are encouraged to participate in REEFVTS on a voluntary basis, along with other ships owned or operated by the Australian Government.

6. Master's responsibilities

It is the responsibility of the ship's master while in the REEFVTS Area to:

- follow the ship reporting requirements – these are described in Marine Order 56 (REEFREP) and outlined in this user guide;
- confirm that information from REEFVTS has been received when asked to do so;
- respond appropriately to all information, warnings, and advice given by REEFVTS;
- keep a listening watch on REEFVTS VHF working channels;
- make sure that the Inmarsat C terminal is logged into the Pacific Ocean Region (POR) at all times; and
- as soon as possible, notify REEFVTS of any:
  - incident/accident affecting the ship's safety;
  - incident/accident affecting safety of navigation;
  - circumstance that may cause pollution;
  - pollutants/containers/packages drifting;
  - change to route plan.

Correct reporting is essential to enable REEFVTS to facilitate the safe navigation of ships through the REEFVTS Area.

7. Failure to report

A failure to report in accordance with Marine Order 56 is a strict liability offence and subject to a maximum penalty of 50 penalty units (presently $A8,500) for an individual. In more serious cases, including where a master deliberately fails to report in accordance with Marine Order 56, or where the master provides information that is false or misleading, the *Navigation Act 2012* creates further offences, with penalties of up to 2,400 penalty units (presently $A408,000) for individuals. AMSA takes these reporting obligations seriously and will respond to alleged contraventions in accordance with AMSA's Compliance and Enforcement Policy.

8. Mandatory reporting requirements

A ship must send the following reports to REEFVTS:

- Pre-Entry Position Report (PER)
- Entry Report (ER)
- Route Plan Report (RP)
- Final Report (FR)

Additional reports which must be sent to REEFVTS include:

- Route Deviation Report (DR)
- Intermediate Position Reports (IP)
- Defect Reports (IR)

Details of the information required for each report are shown in section 8.2.

8.1 Reporting codes reference table

ID	Message type (PER, ER, RP, FR, DR, IP, or IR)
A	Ship name, call sign and IMO number
B	Date and time (UTC)
C	Current position Either the name of the mandatory reporting point, or the current position (latitude and longitude)
F	Speed The planned speed of the ship in knots and tenths of a knot
H	Date, time (UTC) and point of entry to REEFVTS Area Either the name of the first mandatory reporting point entering the Area, or the position (latitude and longitude) of entry
J	Pilot Is a coastal pilot on-board? (State yes or no) If yes, give the pilot's last name and seafarer ID
K	Date, time (UTC) and point of exit from area Either the name of the last mandatory reporting point leaving the Area, or the position (latitude and longitude) of exit
L	Route information Usually a Route Plan Report. If not, the name of the next two mandatory reporting points, or the course if the ship is not tracking between mandatory reporting points
M	Communication methods Primary Inmarsat C details:Inmarsat Mobile Number (IMN), manufacturer and model (for Pre Entry reports). Ship's satellite phone number (for Entry Reports)
O	Draught Fore and aft, in metres and decimetres
P	Cargo on-board Give the normal name of cargo and state whether it is classified as hazardous (yes or no). Note: If required, this information may be given by non-voice means before the first REEFVTS report
Q	Defects, damage, deficiencies or other limitations Describe details of any damage, failure or breakdown: (i) collision, grounding, fire, explosion, structural failure, flooding, cargo shifting; (ii) failure or breakdown of steering gear, propulsion plant, electrical generating system, essential shipboard navigational equipment
R	Pollution/dangerous goods lost overboard Give brief details of the type of pollution (oil, chemicals and so on) or dangerous goods lost overboard. State the ship's position
U	Ship type, length (metres) and gross tonnage Give details of the ship, including ship type, length (metres) and gross tonnage
X	Remarks Give any additional information which would help the navigational safety of shipping in the REEFVTS Area; for example, abnormal weather; faulty navigational aid; or any Dangerous Goods (DG), Harmful Substances (HS) or Marine Pollution (MP) incident reports

8.2 REEFVTS reporting information required

Send all reports to REEFVTS by Inmarsat C or call on the VHF working channels (see section 10).

8.2.1 Pre-entry report (PER)

Give the following information for a pre-entry report:

When/where	Line	Information required	Example
At least two hours before: Entering the REEFVTS Area or Departing from a port within the REEFVTS Area	ID	Message type	ID/PER
	A	Ship name, call sign and IMO number	A/HAPPY SAILOR/ ABCD/1234567
	B	Date and time (UTC)	B/010200UTC
	C	Current position	C/1036S/14144E
	H	Date, time (UTC) and point of entry to the REEFVTS Area	H/010400UTC/BOOBY
	K	Date, time (UTC) and point of exit from the REEFVTS Area	K/042100UTC/SANDY CAPE
	M	Communication methods – Primary Inmarsat C details	M/423456789/JRC/JUE- 85C

8.2.2 Entry report (ER)

Give the following information for an entry report:

When/where	Line	Information required	Example
Immediately on entry to the REEFVTS Area or Departing from a port within the REEFVTS Area	ID	Message type	ID/ER
	A	Ship name, call sign and IMO number	A/HAPPY SAILOR/ ABCD/1234567
	B	Date and time (UTC)	B/010200UTC
	C	Current position	C/1036S/14144E
	F	Speed – ship's planned average speed	F/13
	J	Pilot – is a pilot on-board? (yes/no)	J/NO or J/YES/BROWN/987654
	K	Date, time (UTC) and point of exit from the REEFVTS Area	K/042100UTC/SANDY CAPE
	L	Route information Ship masters are encouraged to provide a Route Plan when providing an Entry Report. However it is understood that this may not be possible until a pilot boards	L/INNER ROUTE DEEP DRAUGHT or L/ALPHA NORTH VIA VARZIN PASSAGE/ HANNIBAL
	M	Ship's satellite phone number	M/870773123456
	O	Draught	O/FORE 11.5/AFT 11.3
	P	Cargo on-board	P/BULK CHEMICALS/ DG YES
	Q	Defects, damage, deficiencies or other limitations	Include details as required
	U	Ship type, length and gross tonnage	U/TANKER/180/28000
	X	Remarks	Include details as required

8.2.3 Route plan report (RP)

Give route plan details either as standard route plan, reporting points or way points.

8.2.3.1 Standard route plan

Standard route plans for the Inner Route and the Great North East Channel are described in detail at Appendix A. Give the following information for a standard route plan report:

When/where	Line	Information required	Example
Send to REEFVTS with entry report (ER)	ID	Message type	ID/RP
	A	Ship name, call sign and IMO number	A/HAPPY SAILOR/ ABCD/1234567
	B	Date and time (UTC)	B/010200UTC
	C	Current position	C/1036S/14144E
	F	Speed – ship's planned average speed	F/13
	K	Date, time (UTC) and point of exit from the REEFVTS Area	K/042100UTC/SANDY CAPE
	L	Route information	L/INNER ROUTE DEEP VIA WEST OF CAIRNCROSS

8.2.3.2 Reporting points

Give the following information for a route plan report using reporting points:

When/where	Line	Information required	Example
Send to REEFVTS with entry report (ER)	ID	Message type	ID/RP
	A	Ship name, call sign and IMO number	A/HAPPY SAILOR/ ABCD/1234567
	B	Date and time (UTC)	B/ 010200UTC
	C	Current position	C/BOOBY
	F	Speed – ship's planned average speed	F/13
	K	Date, time (UTC) and point of exit from the REEFVTS Area	K/042100UTC/SANDY CAPE
	L	Route information Either the name of next two mandatory reporting points, or the course of the ship; or Where there are two or more routes between mandatory reporting points, the planned route (for example, Booby to Alpha North via Varzin Passage).	L/ALPHA NORTH VIA VARZIN PASSAGE/ HANNIBAL

8.2.3.3 Waypoints

Give the following information for route plan report using waypoints:

When/where	Line	Information required	Example
Send to REEFVTS with entry report (ER)	ID	Message type	ID/RP
	A	Ship name, call sign and IMO number	A/HAPPY SAILOR/ ABCD/1234567
	B	Date and time (UTC)	B/010200UTC
	C	Current position	C/1036S/14144E
	F	Speed – ship's planned average speed	F/13
	K	Date, time (UTC) and point of exit from the REEFVTS Area	K/042100UTC/SANDY CAPE
	L	Route Information A list of the planned waypoints for the transit – either the latitude and longitude of the planned waypoints, the reporting point names or a combination of both.	Include details as required

8.2.4 Final report (FR)

Give the following information for a final report:

When/where	Line	Information required	Example
Immediately on exiting the REEFVTS Area or Arriving at a port in the REEFVTS Area	ID	Message type	ID/FR
	A	Ship name, call sign and IMO number	A/HAPPY SAILOR/ ABCD/1234567
	B	Date and time (UTC)	B/010200UTC
	C	Current position	C/SANDY CAPE

8.2.5 Route deviation report (DR)

If the ship deviates from the Route Plan which was sent to REEFVTS, this information should be reported to REEFVTS before the deviation is made.

However, in situations where a deviation is made without much warning, a report should be sent to REEFVTS as soon as possible.

Report the deviation using one of the Route Plan Reports as shown in 8.2.3 above.

8.2.6 Intermediate position reports (IP)

In most cases, a ship's position is being tracked by sensors. Therefore intermediate position reports at the mandatory reporting points are not required.

If the ship's position is not being tracked by sensors, a brief position report must be given as advised by REEFVTS, until sensor data is obtained, at which time intermediate position reports will no longer be required.

Where required, give the following information for an intermediate position report:

When/where	Line	Information required	Example
As advised by REEFVTS	ID	Message type	ID/IP
	A	Ship name, call sign and IMO number	A/HAPPY SAILOR/ ABCD/1234567
	B	Date and time (UTC)	B/010200UTC
	C	Current position	C/BARNARD or C/1742S/14618E
	F	Speed – ship's planned average speed	F/13

8.2.7 Defect report (IR)

Give the following information for a defect report:

When/where	Line	Information required	Example
Immediately if a ship suffers damage, failure or breakdown which affects the ship's safety or Immediately if there is pollution or cargo lost overboard or Special reports as defined by IMO for incidents involving Dangerous Goods (DG), Harmful Substances (HS) or Marine Pollutants (MP)	ID	Message type	ID/IR
	A	Ship name, call sign and IMO number	A/HAPPY SAILOR/ ABCD/1234567
	B	Date and time (UTC)	B/010200UTC
	C	Current position	C/TWO ISLES or C/15252S/145241E
	F	Speed	F/5
	Q	Defects, damage, deficiencies or other limitations	Include details as required
	R	Pollution/dangerous goods lost overboard	Include details as required
	X	Remarks DG, HS, MP incident reports	Include details as required

The requirement to report all marine incidents including defects and deficiencies using form 'AMSA 18' and form 'AMSA 19' remains.

9. Services provided by REEFVTS

REEFVTS provides an information service throughout the REEFVTS area. In addition, in specific areas, REEFVTS provides a navigational assistance service. These areas are identified in Appendix B – REEFVTS Chartlets.

The information that REEFVTS uses comes from AIS, Radar, Automated Position Reporting (APR) via Inmarsat C and the route plans which ships have given to REEFVTS. Route plans are only as accurate as the information that is given in these reports and masters are encouraged to take care that reports are correct.

REEFVTS may not know about all the hazards in the REEFVTS Area. If a ship encounters any hazard which is not already included in Maritime Safety Information (for example, a faulty navigational aid), it should advise REEFVTS.

9.1 Information services

An information service is defined by IMO Resolution A.857(20) as a service to ensure that essential information becomes available in time for on-board navigational decision-making.

9.1.1 Ship Traffic Information (STI)

REEFVTS predicts ship encounters and sends this information to individual ships as Ship Traffic Information (STI), usually through Inmarsat C messaging. STI is specific for each individual vessel there is no general broadcasts.

REEFVTS advises individual ships of STI:

1) when the ship enters the REEFVTS Area;
2) when there is new or changed traffic information;
3) in an update every 4-6 hours, depending on the ship's speed; and
4) at any other time when the ship asks REEFVTS to provide it.

Some common STI phrases are:

Pass	–	indicates that the ship is stopped
Overtake	–	indicates that the ships are heading in roughly the same direction at the position of the predicted encounter
Meet	–	describes all other situations
(P)	–	indicates a piloted ship
(NP)	–	indicates a non-piloted ship
(DD)	–	indicates a deep draught ship

9.1.1.1 When a ship enters the REEFVTS Area

A ship will receive STI about predicted ship encounters and Maritime Safety Information for the next six hours of its transit. The STI lists the ship, the time and the location of the predicted encounter.

Example:

Expected STI (EST):
Meet SILVER ZHANG (P) in your area now
Overtake ENDEAVOUR RIVER (P) at 10 1215
Meet FAR EASTERN SILO (P) at 10 1240
Meet GLORIOUS HALO (P) at 10 1325
Light altered AUSCOAST warning 340 at 10 30 S 142 13 E

9.1.1.2 New or changed traffic information

REEFVTS monitors the transit of a ship to identify any significant changes to the traffic information which REEFVTS has previously given. An example of this could be when a new ship is identified or there is a change in ETA because of an increase or decrease in speed.

If there is new or changed traffic information, REEFVTS gives the ship updated traffic information for the next six hours, listing the predicted encounters as either:

- new;
- changed; or
- unchanged.

Example:

> Expected STI (EST):
> Meet JAVA SEA (P) at 25 0755
> (Changed) pass OOCL ENVOY (P) at 25 0925
> (New) meet CHAMPION (NP) at 25 1125

9.1.1.3 Traffic information updates

When a ship has transited the REEFVTS Area for a period of 4-6 hours (depending on a ship's speed) and there has been no new or changed traffic information, REEFVTS gives the ship updated traffic information for the next six hours as described under 9.1.1.1 above.

This update will also indicate if there are no predicted ship encounters for the next six hours. A ship may contact REEFVTS at any time to ask for an STI update.

9.1.1.4 Receiving ship traffic information

REEFVTS prefers to deliver STI as an electronic message directly to the ship. If a problem exists in receiving electronic messages, REEFVTS can provide STI by VHF voice communications.

Electronic messages can be sent to either:

- Ship's Inmarsat C terminal - The ship must give REEFVTS the make, model and IMN of the ship's Inmarsat C terminal
- Email address on-board the ship - Provide an email address which can be readily accessed on the bridge.

Where STI is provided by VHF voice communications, ships must keep a listening watch on the REEFVTS VHF working channels. REEFVTS uses VHF channels 11 and 14 as shown in Section 10.

9.1.2 Maritime Safety Information (MSI)

REEFVTS gives ships Maritime Safety Information (MSI) that is relevant to their location and intended movement. If a ship encounters any hazard that may affect the navigational safety of other ships, it should contact REEFVTS.

MSI is sent to ships with the Ship Traffic Information. MSI is also given in broadcasts from RCC Australia in the form of navigational warnings (AusCoast Warnings).

9.2 Navigational assistance services

A navigational assistance service is defined by IMO Resolution A.857(20) as a service to assist on-board navigational decision-making and to monitor its effects.

If REEFVTS has information which may help decision-making on-board a ship, REEFVTS may contact that ship.

REEFVTS may contact a ship if it believes that the ship is heading into shallow water or deviating from a planned route.

A ship may receive Navigational Assistance Services in areas shown in Appendix B.

The master remains responsible for the safe navigation of the ship at all times and should not rely on the availability of Navigational Assistance from REEFVTS.

10. Communication with REEFVTS

Communication with REEFVTS is in English, using IMO's Standard Marine Communication Phrases. The means of communication can be using VHF radio (voice); Inmarsat C or other means.

10.1 VHF Radio

REEFVTS can be contacted 24 hours a day on either VHF Channel 11 or 14 (Radio call sign – REEFVTS). The channel to be used will depend on the ship's position as shown in the following table and Figure 2 on the next page.

Latitude from:	Latitude to:	VHF channel
9° 00' S	13° 30' S	14
13° 30' S	18° 00' S	11
18° 00' S	20° 00' S	14
20° 00' S	22° 00' S	11
22° 00' S	24° 30' S	14

VHF coverage is limited in some areas. Please use other communication methods such as Inmarsat C messaging, and email in these areas between:

- Inset (J) and Heath (K) - Lads Passage and Fairway Channel
- Swain (Z1) and Archer (Z2) – Offshore from Gladstone in the south-eastern area

10.2 Inmarsat C messaging

REEFVTS will pay the cost of messages sent by Inmarsat C if the ship uses the special access code (SAC) 861 via POR LES 212.

When setting up the Inmarsat C address book, select either: ASCII or 7-bit or IA5 for data presentation or character code.

Inmarsat C terminals must be logged into the Pacific Ocean Region (POR).

Ships can also send messages to REEFVTS by email, at reefvts@vtm.qld.gov.au. Ships will pay for the cost of these messages.

10.3 Other communications

If for any reason a ship cannot communicate via Inmarsat C or the VHF working channel, the ship must send the required information to REEFVTS in another way. The ship can use one of the following:

- Telephone: +61 1300 721 293
- Facsimile: +61 7 4721 0633
- Email: reefvts@vtm.qld.gov.au

If a ship's radio equipment fails and the ship cannot send the required reports to REEFVTS, the failure must be recorded in the ship's radio log book or the official log book.

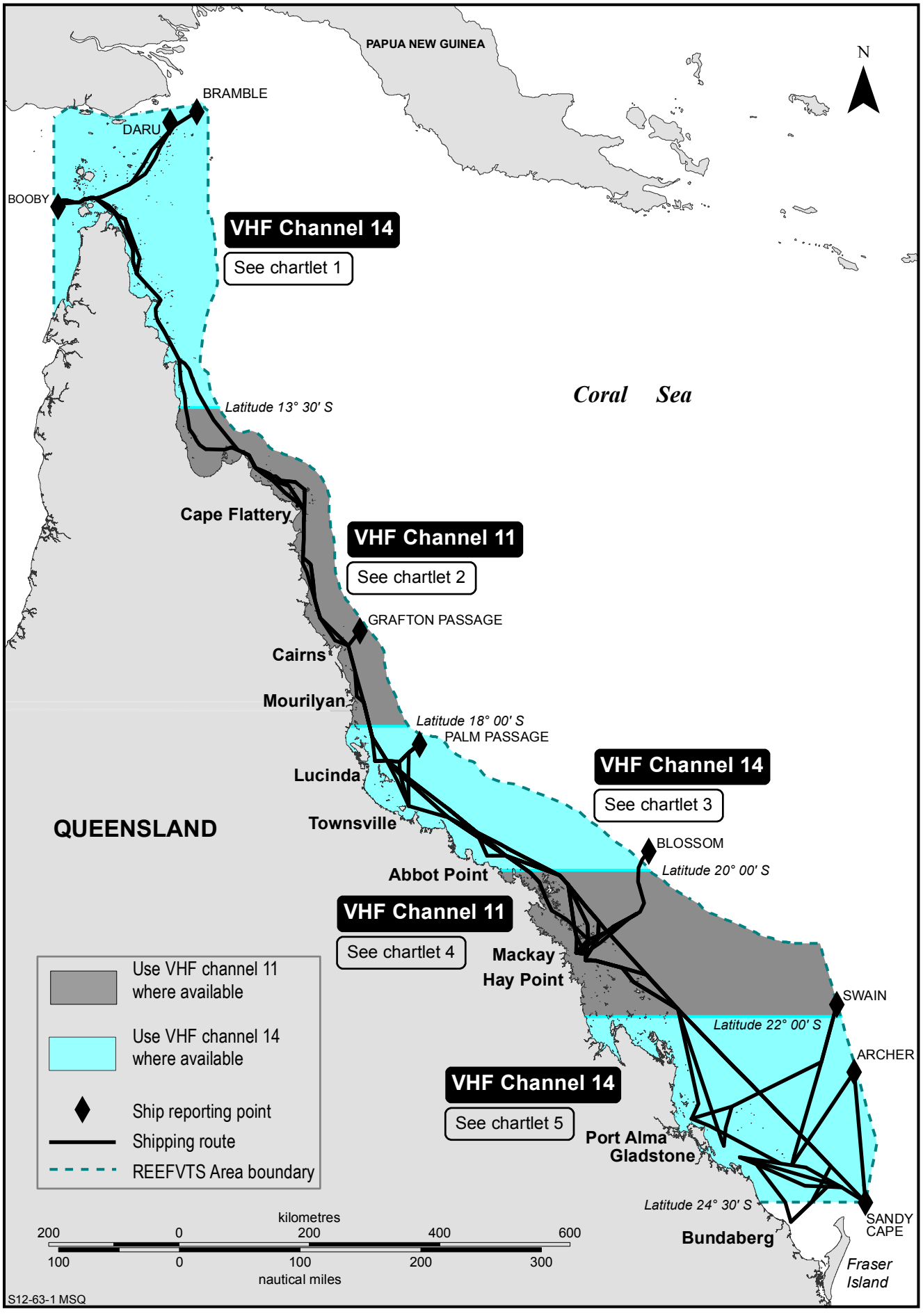


Figure 2 - REEFVTS VHF Channel overview

11. Other rules and regulations

11.1 Pilotage Areas in the REEFVTS Area

Under Australian law ships with a length overall of 70 metres or more, and all loaded oil tankers, chemical carriers and liquefied gas carriers (irrespective of length) must carry a licensed coastal pilot in sections of the Torres Strait and the Great Barrier Reef. Coastal pilots are licensed by the Australian Maritime Safety Authority.

A coastal pilot is required for a tug and tow if either the towing vessel or the vessel being towed has an length overall of 70 metres or more, regardless of the length of tow.

The areas where a coastal pilot is required are shown in Figure 3 on the next page. Ship masters must ensure that a pilot is aboard the ship at all times in these areas (by embarking the pilot prior to entry and disembarking the pilot after exiting the pilotage area).

The Queensland Coastal Passage Plan (QCPP) has been developed as a guide for the conduct of coastal pilotage in these areas. Further information on coastal pilotage and QCPP is available on the AMSA website www.amsa.gov.au (under Coastal Pilotage).

11.1.1 Great Barrier Reef – Inner Route, Hydrographers Passage and Whitsundays

In the Great Barrier Reef, coastal pilotage requirements apply in:

- the Inner Route of the Great Barrier Reef between Cape York (latitude 10° 41’ S) and the vicinity of Cairns Roads (latitude 16° 40’ S); or
- Hydrographers Passage; and
- the Whitsundays.

Further information including the boundaries of these pilotage areas can be found in Marine Order 54 (Coastal Pilotage) and the *Great Barrier Reef Marine Park Regulations (1983)*.

11.1.2 Torres Strait – Great North Eastern Channel

Those ships that require pilotage (outlined above) that have a draught of 8 metres or more must have a licensed coastal pilot on-board when transiting Torres Strait Compulsory Pilotage Area A (bounded by the longitudes 141° 50’ E and 142° 05’ E for ships moving eastward and between 142° 05’ E and 141° 51.70’ E for ships moving westward).

All ships of any draught, that require pilotage, must have a licensed coastal pilot on-board when transiting Torres Strait Pilotage Area B (bounded by the longitudes 142° 05’ E and 143° 22’ E for ships moving eastward, and 142° 05’ E and 143° 24’ E for ships moving westward).

The outermost boundaries have been established to ensure that a pilot boarding a ship entering the Torres Strait has sufficient preparation time on-board prior to entering the respective pilotage area.

Further information on coastal pilotage is available in Marine Order 54 (Coastal Pilotage).

11.2 Torres Strait – Under Keel Clearance Management

The Australian Maritime Safety Authority has introduced an Under Keel Clearance Management (UKCM) System. The goal of this web-based system is to improve the safety and efficiency of shipping through Torres Strait.

More information on the UKCM System is available at the AMSA website www.amsa.gov.au.

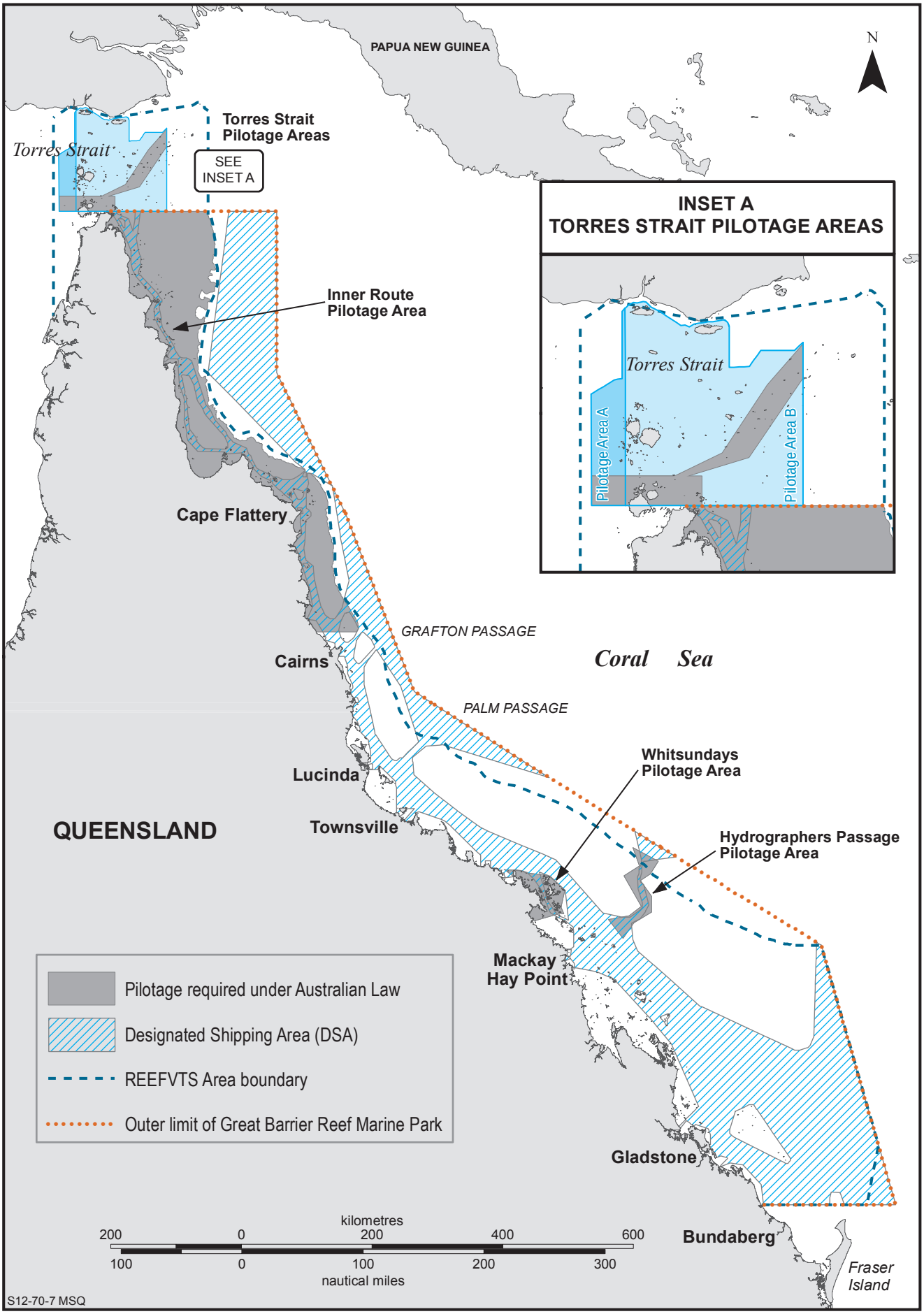


Figure 3 - Coastal pilotage areas and Designated Shipping Area (DSA)

11.3 Designated Shipping Areas in the Great Barrier Reef Marine Park

The Great Barrier Reef Marine Park Authority (GBRMPA) has put in place a Designated Shipping Area and General Use Zones within the Great Barrier Reef Marine Park as part of the Great Barrier Reef Marine Park Zoning Plan.

Ship operators need a permit from the Great Barrier Reef Marine Park Authority to navigate outside the Designated Shipping Area and General Use Zones.

A penalty of up to 2,000 penalty units (presently A$340,000) for an individual and 20,000 penalty units (presently A$3,400,000) for a body corporate applies if a ship is navigated outside the Designated Shipping Area and the General Use Zones without written permission from the Great Barrier Reef Marine Park Authority.

Further information is available from GBRMPA by phoning +61 7 4750 0700, emailing info@gbrmpa.gov.au or at the GBRMPA website www.gbrmpa.gov.au.

11.4 Reporting to MASTREP

The Modernised Australian Ship Tracking and Reporting System (MASTREP) is another ship reporting system which is operated by AMSA as part of the services offered by the Rescue Coordination Centre (RCC Australia) in Canberra.

MASTREP is designed to minimise the reporting requirements on vessels by using AIS technology to provide positional advice to AMSA. There is no requirement in MASTREP to send Sailing Plans, Deviation Reports and Final Reports.

Marine Order 63 defines the MASTREP Area and lists the classes of ships which must report to MASTREP. The system is mandatory for:

- foreign vessels from the arrival at its first port in Australia until its departure from its final port in Australia; and
- all listed classes of Australian vessels whilst in the MASTREP area.

Please note that no positive SAR watch is maintained in MASTREP. It is a passive ship reporting system and does not involve shore to vessel communications for normal operation. The requirement to report all marine incidents including defects and deficiencies using form ‘AMSA 18’ and form ‘AMSA 19’ remains. Additionally, Information Reports may be sent to RCC Australia to provide advice relating to items not covered under AMSA form 18 or 19 reporting requirements, for example floating navigational hazards.

Further information is provided in the MASTREP and Australian Mandatory Reporting Guide. This Guide is available from AMSA offices or the AMSA website www.amsa.gov.au.

11.5 Pollution reporting

The MARPOL 73/78 definition of “nearest land” prohibits operational discharges in the Great Barrier Reef and Torres Strait regions.

The following should be reported to REEFVTS:

- any quantity of oil (including diesel fuel, petrol and oil products);
- any discharge from a ship of chemicals or chemical residues; or
- garbage (food waste, glass, plastic etc).

Information on reporting ship sourced pollution is available on:

- AMSA website www.amsa.gov.au/environment/reporting-ship-sourced-pollution
- MSQ website www.msq.qld.gov.au/environment.

Appendix A – Standard route plans

A.1 Inner route

There are three standard route plans for transiting the REEFVTS Area by the inner route between Booby and Sandy Cape. The route plan applies in either direction of the transit and also applies to any portion of the inner route.

The standard route plan should be communicated to REEFVTS by stating:

- inner route;
- predefined route by communicating the ship's draught of deep, moderate or shallow; and
- the name of any alternative legs intended to be taken that vary from the standard route (for example, shaded boxes) for that draught category.

For example, a ship plans to transit the inner route, moderate draught route via Varzin Passage (rather than using the standard route via Gannet Passage). This should be communicated to REEFVTS as "INNER ROUTE, MODERATE VIA VARZIN".

Deep draught		Moderate draught		Shallow draught	
Standard route	**Alternative**	**Standard route**	**Alternative**	**Standard route**	**Alternative**
BOOBY		**BOOBY**		**BOOBY**	
via Varzin Passage	via Gannet Passage	**via Gannet Passage**	via Varzin Passage	**via Gannet Passage**	
ALPHA NORTH	via ALPHA SOUTH	**ALPHA NORTH**	via ALPHA SOUTH	**ALPHA NORTH**	via ALPHA SOUTH
via East of Cairncross	via West of Cairncross	**via East of Cairncross**	via West of Cairncross	**via East of Cairncross**	via West of Cairncross
HANNIBAL		**HANNIBAL**		**HANNIBAL**	
INSET		**INSET**		**INSET**	
via Fairway Channel	via HEATH	**via Fairway Channel**	via HEATH	**via Fairway Channel**	via HEATH
PIPON		**PIPON**		**PIPON**	
via Howicks		**via Miles**	Via Howicks	**via Miles**	
via Lizard Island/ Palfrey		**Via Mid-Decapolis**		**via Petherbridge**	via Mid-Decapolis
TWO ISLES		**TWO ISLES**		**TWO ISLES**	
GUBBINS WEST	via GUBBINS EAST	**GUBBINS WEST**	via GUBBINS EAST	**GUBBINS WEST**	via GUBBINS EAST
BARNARD		**BARNARD**		**BARNARD**	
BOWLING NORTH	via BOWLING SOUTH	**BOWLING NORTH**	via BOWLING SOUTH	**BOWLING NORTH**	via BOWLING SOUTH
Via North Holbourne	via South Holbourne	**Via North Holbourne**	via South Holbourne	**Via North Holbourne**	via South Holbourne
EDWARD	Via MOLLE/ SHAW	**EDWARD**	Via MOLLE/ SHAW	**EDWARD**	Via MOLLE/ SHAW
HIGH PEAK		**HIGH PEAK**		**HIGH PEAK**	
SANDY CAPE		**SANDY CAPE**		**SANDY CAPE**	

A.2 Great North East Channel

Ships transiting the Great North East Channel enter or exit the REEFVTS Area in three main locations. These are Booby, Bramble or Daru.

The standard route plan should be communicated to REEFVTS by stating:

- GNE Channel;
- the first set of alternative legs intended to be taken; and
- the second set of alternative legs intended to be taken.

For example, a ship enters at Booby and exits at Bramble, the first leg is via Varzin Passage and the second leg is via West of Coconut Island. This should be communicated to REEFVTS as “GNE, VIA VARZIN AND WEST OF COCONUT ISLAND”.

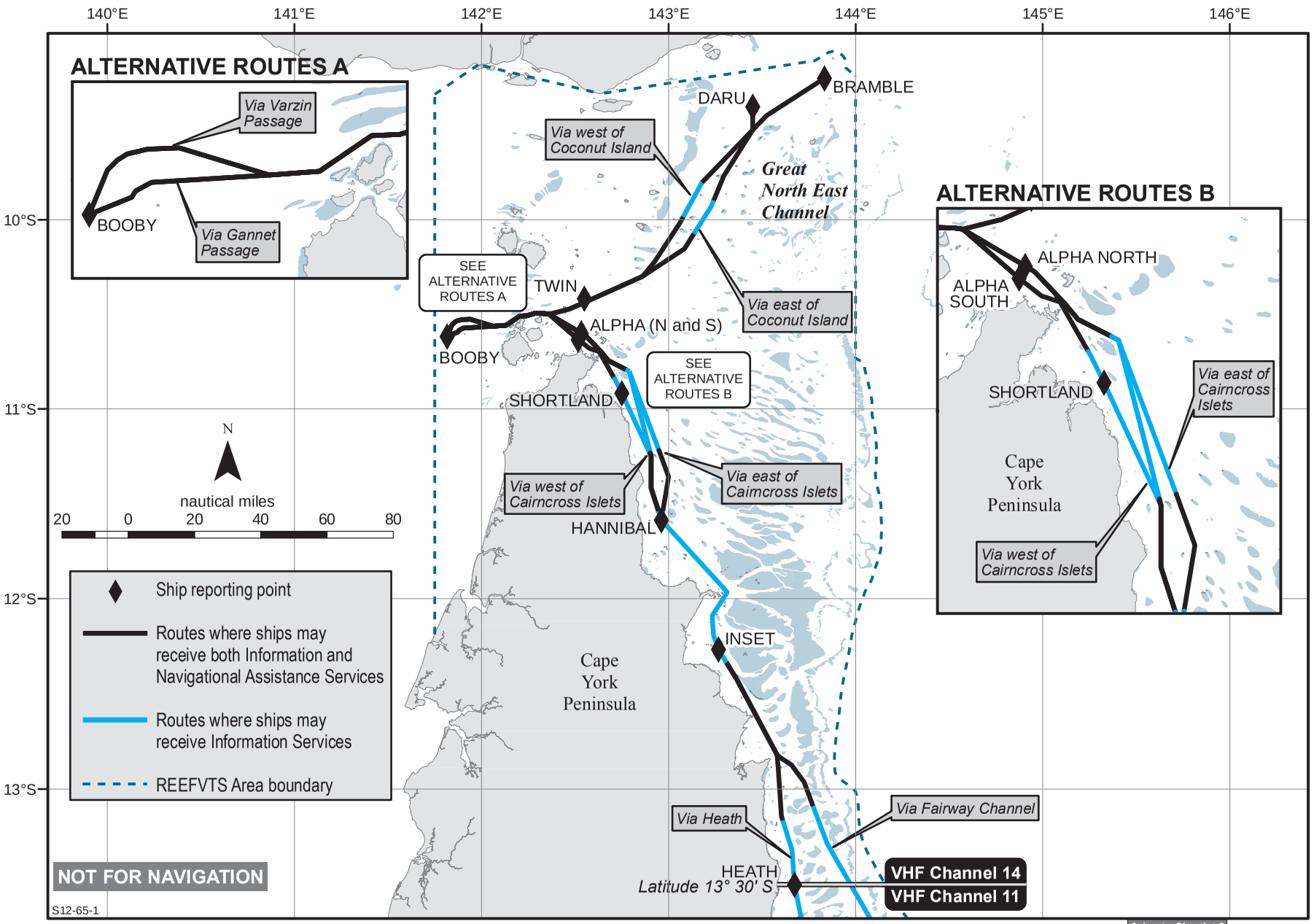
Standard route	Alternative
BOOBY	
via Gannet Passage	via Varzin Passage
TWIN	
via West of Coconut Island	via East of Coconut Island
BRAMBLE	DARU

The Queensland Coastal Passage Plan provides more information on routes, waypoints and navigation aids in the pilotage areas (outlined in Section 11.1). The Queensland Coastal Passage Plan can be accessed from the AMSA website (www.amsa.gov.au/navigation/shipping-management/pilotage/).

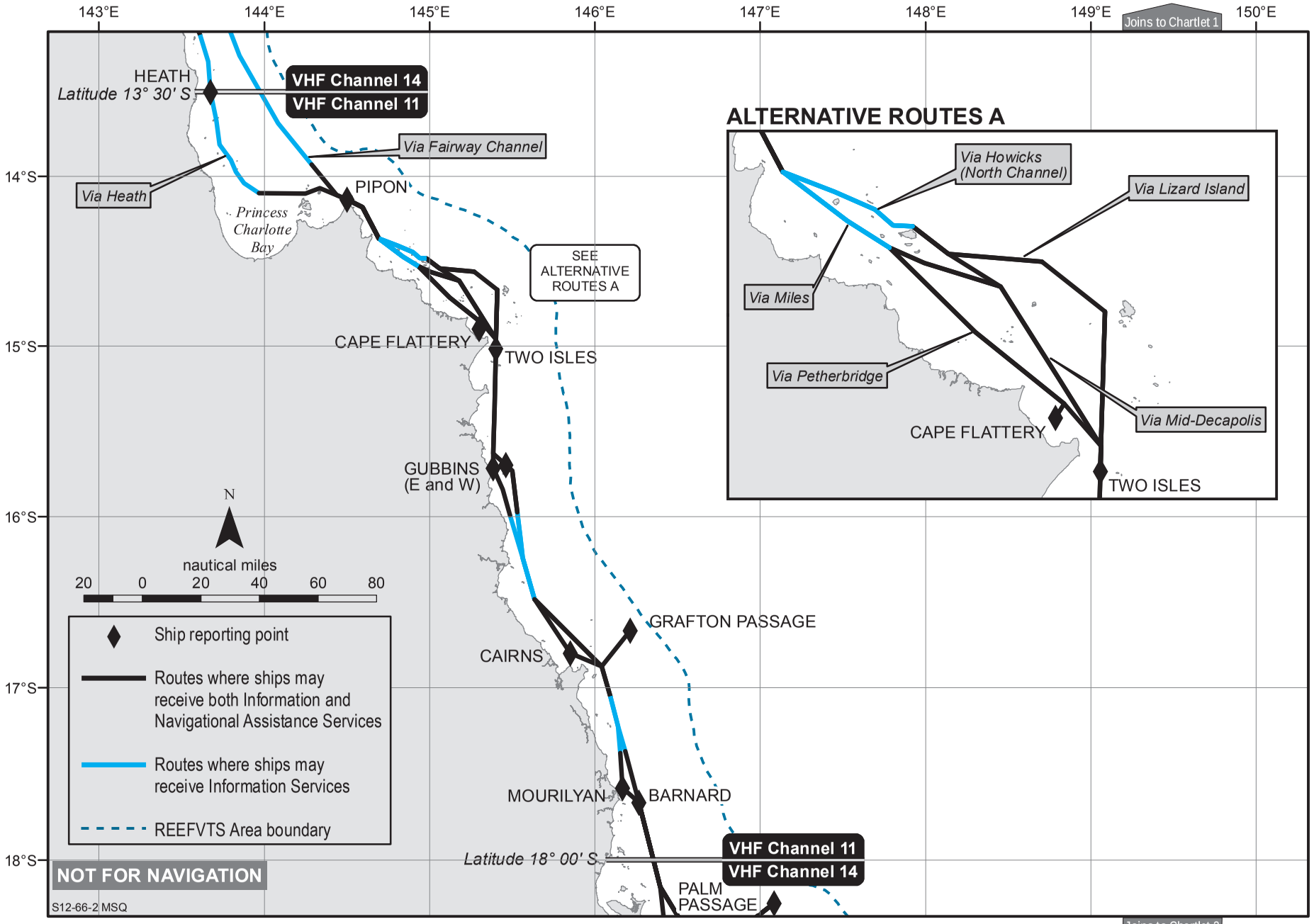
Appendix B – REEFVTS chartlets

The following chartlets show:

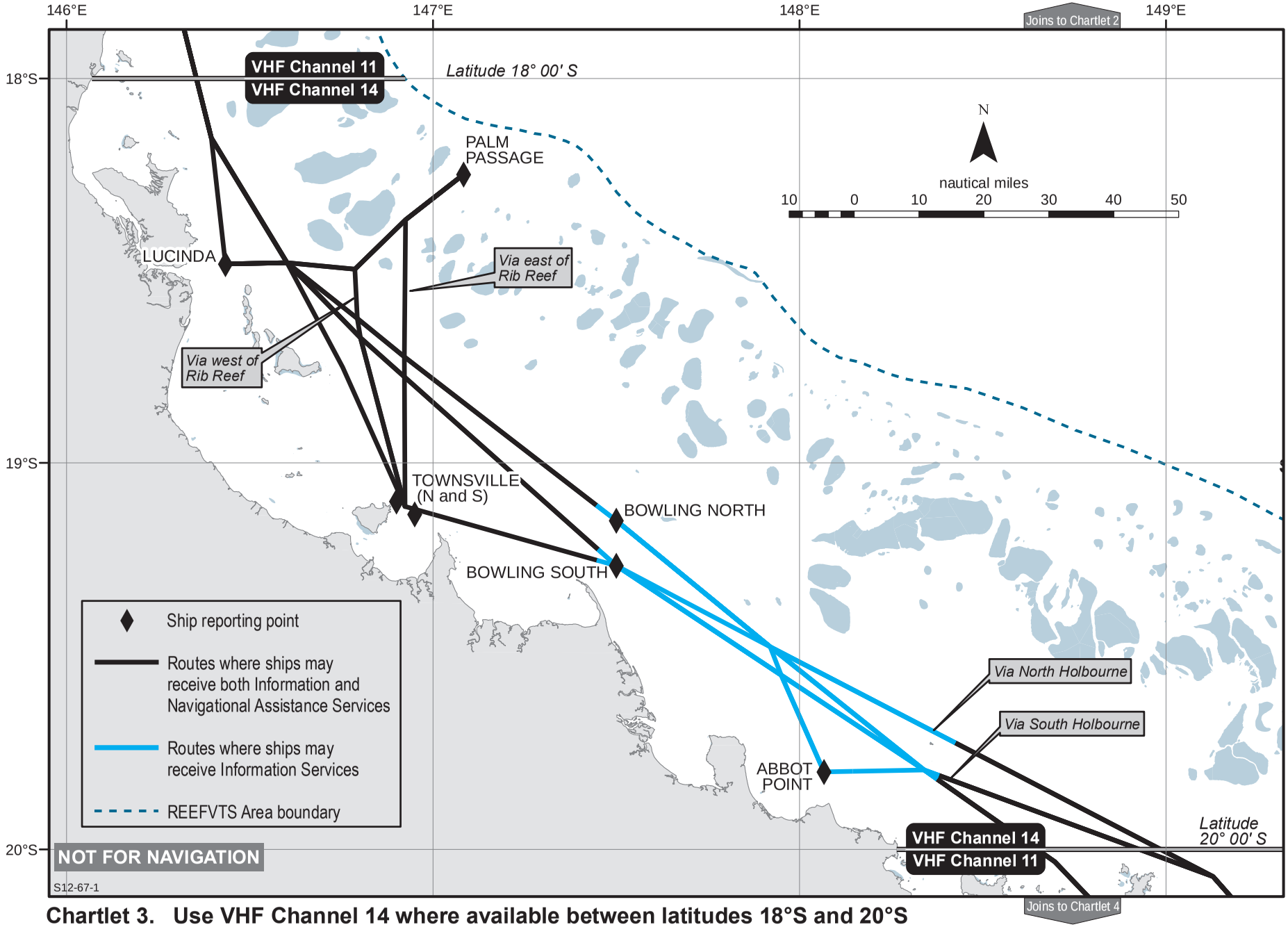
- details of the standard routes and alternatives;
- the VHF working channels;
- routes where ships may receive both information and navigational assistance services; and
- routes where ships may receive information services.



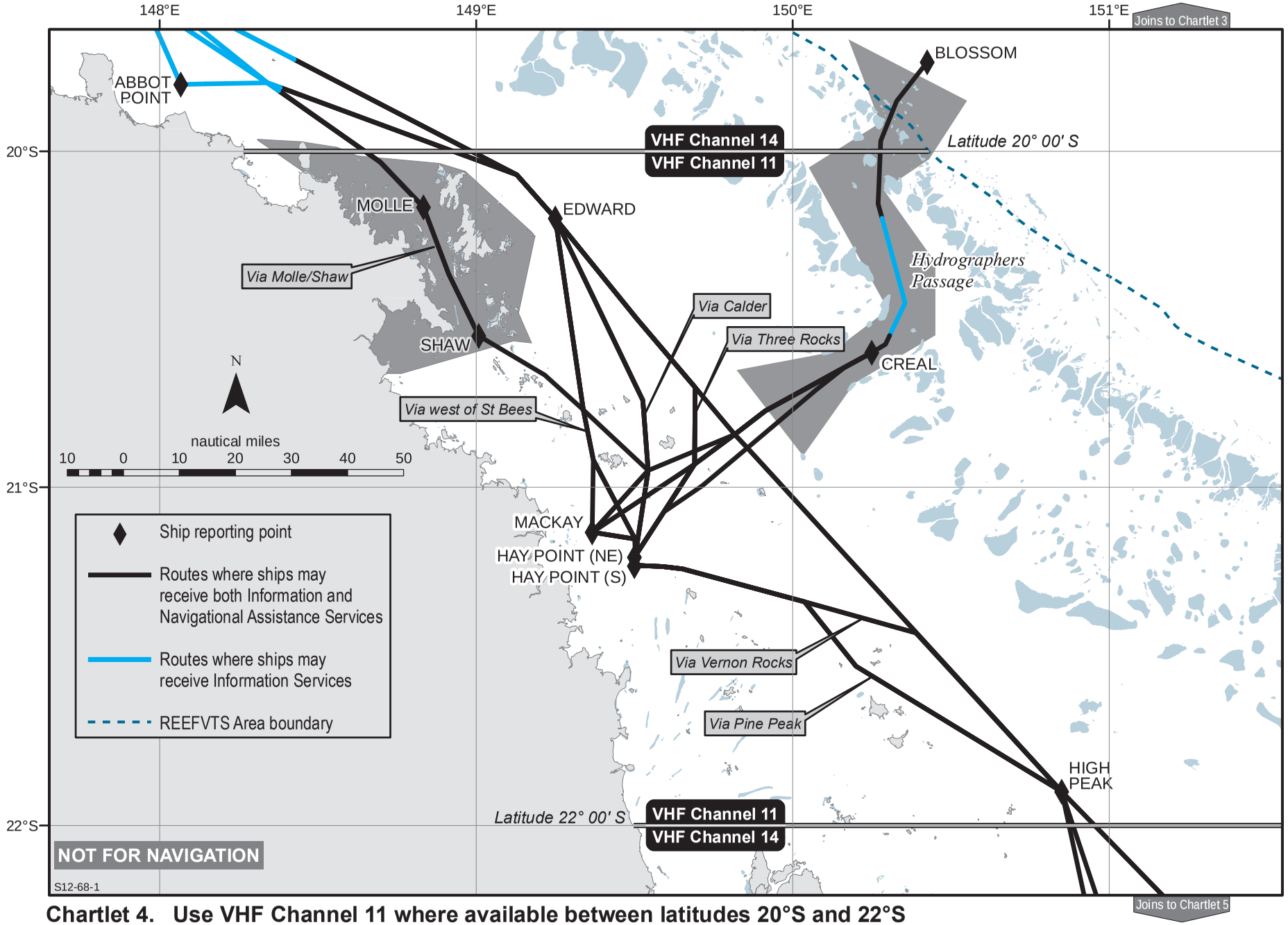
Chartlet 1. Use VHF Channel 14 where available



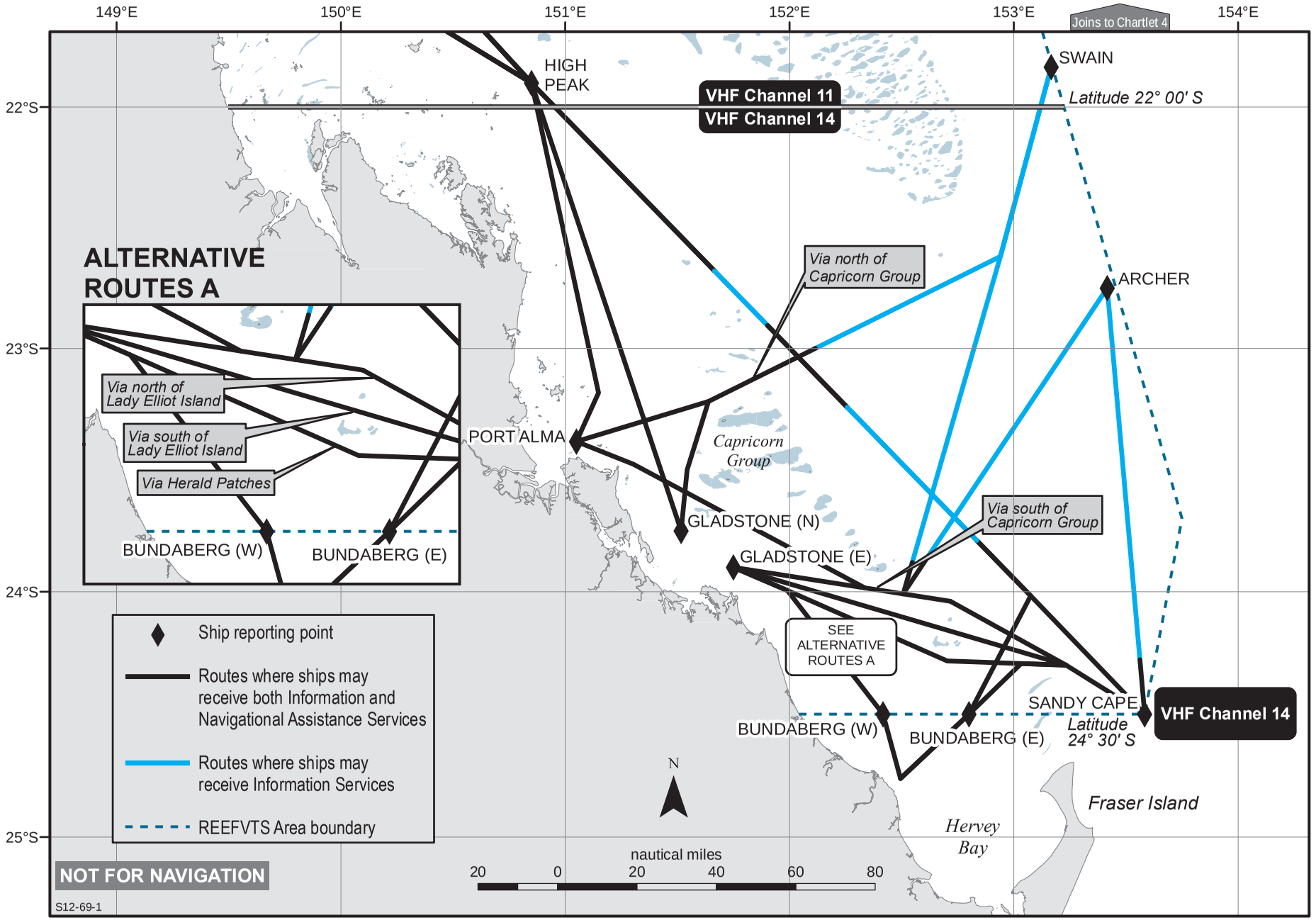
Chartlet 2. Use VHF Channel 11 where available between latitudes 13°30'S and 18°S



Chartlet 3. Use VHF Channel 14 where available between latitudes 18°S and 20°S



Chartlet 4. Use VHF Channel 11 where available between latitudes 20°S and 22°S



Chartlet 5. Use VHF Channel 14 where available between latitudes 22°S and 24°30'S